

# STIC Search Results Feedback Form

**EIC 2100**

Questions about the scope or the results of the search? Contact *the EIC searcher* or contact:

Alyson Dill, EIC 2100 Team Leader  
272-3527, RND 4B28

## Voluntary Results Feedback Form

➤ I am an examiner in Workgroup:  Example: 2133

➤ Relevant prior art **found**, search results used as follows:

- ☐ 102 rejection
- ☐ 103 rejection
- ☐ Cited as being of interest.
- ☐ Helped examiner better understand the invention.
- ☐ Helped examiner better understand the state of the art in their technology.

Types of relevant prior art found:

- ☐ Foreign Patent(s)
- ☐ Non-Patent Literature  
(Journal articles, conference proceedings, new product announcements etc.)

➤ Relevant prior art **not found**:

- ☐ Results verified the lack of relevant prior art (helped determine patentability).
- ☐ Results were not useful in determining patentability or understanding the invention.

Comments:

Drop off or send completed forms to STIC/EIC2100 RND, 4B28

Access DB# 192925  
53

# SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Ali Abyaneh Examiner #: 80755 Date: 6-14-06  
Art Unit: 2137 Phone Number 30 7961 Serial Number: 10086203  
Mail Box and Bldg/Room Location: 2B65 Results Format Preferred (circle) PAPER DISK E-MAIL

**If more than one search is submitted, please prioritize searches in order of need.**  
\*\*\*\*\*

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: System and Methods for Obtaining Digital Signatures on a Single Authoritative  
copy of an original electronic record  
Inventors (please provide full names): ① Scott G. Ainsworth ② Charles F. Hawkins ③ Donald J. Pastor

Earliest Priority Filing Date: 11-26-01

*\*For Sequence Searches Only\* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

The invention is related to maintaining control of an electronic record (electronic document), which provides a secure electronic transaction. I have searched class 713/155,181. References used are US Patent # 5,748,738 and 6,212,281.

RECEIVED  
JUN 14 2006  
BY: [Signature]

[Signature]  
EMMANUEL L. MOISE  
SUPERVISORY PATENT EXAMINER

File 88:Gale Group Business A.R.T.S. 1976-2006/Jun 08  
     (c) 2006 The Gale Group  
 File 369:New Scientist 1994-2006/Jun W2  
     (c) 2006 Reed Business Information Ltd.  
 File 160:Gale Group PROMT(R) 1972-1989  
     (c) 1999 The Gale Group  
 File 635:Business Dateline(R) 1985-2006/Jun 16  
     (c) 2006 ProQuest Info&Learning  
 File 15:ABI/Inform(R) 1971-2006/Jun 16  
     (c) 2006 ProQuest Info&Learning  
 File 16:Gale Group PROMT(R) 1990-2006/Jun 15  
     (c) 2006 The Gale Group  
 File 9:Business & Industry(R) Jul/1994-2006/Jun 15  
     (c) 2006 The Gale Group  
 File 13:BAMP 2006/Jun W1  
     (c) 2006 The Gale Group  
 File 810:Business Wire 1986-1999/Feb 28  
     (c) 1999 Business Wire  
 File 610:Business Wire 1999-2006/Jun 16  
     (c) 2006 Business Wire.  
 File 647:CMP Computer Fulltext 1988-2006/Jul W3  
     (c) 2006 CMP Media, LLC  
 File 98:General Sci Abs 1984-2005/Jan  
     (c) 2006 The HW Wilson Co.  
 File 148:Gale Group Trade & Industry DB 1976-2006/Jun 16  
     (c)2006 The Gale Group  
 File 634:San Jose Mercury Jun 1985-2006/Jun 15  
     (c) 2006 San Jose Mercury News  
 File 275:Gale Group Computer DB(TM) 1983-2006/Jun 15  
     (c) 2006 The Gale Group  
 File 47:Gale Group Magazine DB(TM) 1959-2006/Jun 16  
     (c) 2006 The Gale group  
 File 75:TGG Management Contents(R) 86-2006/Jun W1  
     (c) 2006 The Gale Group  
 File 636:Gale Group Newsletter DB(TM) 1987-2006/Jun 15  
     (c) 2006 The Gale Group  
 File 624:McGraw-Hill Publications 1985-2006/Jun 16  
     (c) 2006 McGraw-Hill Co. Inc  
 File 484:Periodical Abs Plustext 1986-2006/Jun W2  
     (c) 2006 ProQuest  
 File 613:PR Newswire 1999-2006/Jun 16  
     (c) 2006 PR Newswire Association Inc  
 File 813:PR Newswire 1987-1999/Apr 30  
     (c) 1999 PR Newswire Association Inc  
 File 141:Readers Guide 1983-2006/Feb  
     (c) 2006 The HW Wilson Co  
 File 370:Science 1996-1999/Jul W3  
     (c) 1999 AAAS  
 File 696:DIALOG Telecom. Newsletters 1995-2006/Jun 15  
     (c) 2006 Dialog  
 File 553:Wilson Bus. Abs. 1982-2006/Jun  
     (c) 2006 The HW Wilson Co  
 File 621:Gale Group New Prod.Annou.(R) 1985-2006/Jun 16  
     (c) 2006 The Gale Group  
 File 674:Computer News Fulltext 1989-2006/Jun W2  
     (c) 2006 IDG Communications

Set	Items	Description
S1	298991	(E OR ELECTRONIC OR DIGITAL?? OR ONLINE OR ON()LINE) (3N) (R- ECORD? ? OR DOCUMENT? ?) OR ERECORD? ? OR EDOCUMENT? ?
S2	490177	AUTHENTICAT??? OR AUTHENTIC???

S3 667509 RECEIPT? ? OR (PROOF OR ACKNOWLEDG??? OR ACKNOWLEDGEMENT OR  
 CONFIRM??? OR CONFIRMATION? ?) (3N) (RECEIV??? OR SUBMIT???? OR  
 SUBMISSION? ? OR INPUT????)  
 S4 2244 S3(3N) (APPEND??? OR PREPEND??? OR ATTACH??? OR CONCATENAT?-  
 ?? OR CONJOIN??? OR JOIN??? OR CONNECT???)  
 S5 56744 MESSAGE()DIGEST? ? OR HASH??? OR ONE()WAY() (FUNCTION? ? OR  
 ALGORITHM? ?)  
 S6 141335 (E OR ELECTRONIC???? OR DIGITAL??) (3N) (SIGNATURE? ? OR SIG-  
 N? ? OR SIGNING OR SIGNED)  
 S7 638 S6(3N) (REMOTE?? OR OFF()SITE? ? OR DISTANT?? OR DISTANCE)  
 S8 118166 (USER? ? OR SIGNER? ? OR SIGNATOR??? OR PERSON? ?) (3N) (RE-  
 MOTE?? OR OFF()SITE? ? OR DISTANT?? OR DISTANCE)  
 S9 351 S5(3N) (PART OR PARTS OR PARTLY OR PARTIAL?? OR INCOMPLETE??  
 OR UNCOMPLETE? ? OR .NOT.()COMPLETE? ? OR FRACTION?? OR HALF  
 OR HALFWAY OR SECTION??)  
 S10 4028 S3(3N) (INTERNAL?? OR SECUR??? OR INTRANET? ?)  
 S11 22 (S1 OR S6) (100N) S4  
 S12 15 RD (unique items)  
 S13 8 S12 NOT PY=2002:2006  
 S14 36 S1(100N) S6(100N) S10  
 S15 16 RD (unique items)  
 S16 16 S15 NOT S12  
 S17 15 S16 NOT PY=2002:2006  
 S18 94 S4(20N) (DOCUMENT? ? OR RECORD? ?)  
 S19 721 S6(10N) S8 OR S7  
 S20 58 S19(100N) S1  
 S21 28 RD (unique items)  
 S22 12 S21 NOT PY=2002:2006  
 S23 14 (S1 OR S6) (100N) S9  
 S24 13 RD (unique items)  
 S25 10 S24 NOT PY=2002:2006  
 S26 117 S5(3N) (PARTIAL?? OR INCOMPLETE?? OR UMCOMPLETE?? OR "NOT"(-  
 )COMPLETE? ? OR FRACTION?? OR HALF OR HALFWAY)  
 S27 1 S26(100N) (S1 OR S6)  
 S28 7 S26(100N) (DOCUMENT? ? OR RECORD? ?)  
 S29 5 RD (unique items)  
 S30 5 S29 NOT (S12 OR S16 OR S21 OR S24)  
 S31 5 S30 NOT PY=2002:2006

17/3,K/5 (Item 3 from file: 16)  
DIALOG(R) File 16:Gale Group PROMT(R)  
(c) 2006 The Gale Group. All rts. reserv.

06950199 Supplier Number: 58662652 (USE FORMAT 7 FOR FULLTEXT)  
**ValiCert Demonstrates Next Wave in E-Commerce With Digital Receipts.**  
PR Newswire, p5021  
Jan 19, 2000  
Language: English Record Type: Fulltext  
Document Type: Newswire; Trade  
Word Count: 613

... and offer comprehensive dispute resolution capabilities. XML-based digital receipts generated for each transaction are **digitally signed**, timestamped and verified using the ValiCert Receipt Notary(TM) and sent to the ValiCert **Receipt Vault**(TM) for **secure** archival. ValiCert's technology provides authenticated delivery of the digital receipt, verifying the sender and...

...modified since being transmitted.

#### About Digital Receipts

The digital receipt is a convenient and friendly **digital document** consumers, businesses, retailers, banks and software companies can use to securely send and receive information...

17/3,K/12 (Item 1 from file: 148)  
DIALOG(R)File 148:Gale Group Trade & Industry DB  
(c)2006 The Gale Group. All rts. reserv.

12296419 SUPPLIER NUMBER: 62657568 (USE FORMAT 7 OR 9 FOR FULL TEXT)

**Welcome to a paperless world.**

Jessop, David

Banker, 150, 891, 98

May, 2000

ISSN: 0005-5395 LANGUAGE: English RECORD TYPE: Fulltext

WORD COUNT: 1320 LINE COUNT: 00117

... legal environment for dematerialised trade.

Bolero.net acts as a neutral third party to ensure **secure** delivery and **receipt** of information and provides a unique legal structure that binds all users together. Key components...

...around the world.

\* Bolero.net has been established with up-to-date cryptographic technology incorporating **digital signatures** that cannot be changed and permit only authorised access.

\* Concerns over security are alleviated by...

...Swift provides guaranteed delivery and, with users required to sign up to the rule book, **electronic documents** sent through the service are contractually binding. In addition, using bolero.net compares favourably with...

File 2:INSPEC 1898-2006/Jun W1  
(c) 2006 Institution of Electrical Engineers  
File 6:NTIS 1964-2006/Jun W1  
(c) 2006 NTIS, Intl Cpyrght All Rights Res  
File 8:Ei Compendex(R) 1970-2006/Jun W1  
(c) 2006 Elsevier Eng. Info. Inc.  
File 23:CSA Technology Research Database 1963-2006/Jun  
(c) 2006 CSA.  
File 34:SciSearch(R) Cited Ref Sci 1990-2006/Jun W2  
(c) 2006 Inst for Sci Info  
File 35:Dissertation Abs Online 1861-2006/May  
(c) 2006 ProQuest Info&Learning  
File 65:Inside Conferences 1993-2006/Jun 16  
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File 94:JICST-EPlus 1985-2006/Mar W2  
(c)2006 Japan Science and Tech Corp(JST)  
File 95:TEME-Technology & Management 1989-2006/Jun W2  
(c) 2006 FIZ TECHNIK  
File 99:Wilson Appl. Sci & Tech Abs 1983-2006/May  
(c) 2006 The HW Wilson Co.  
File 111:TGG Natl.Newspaper Index(SM) 1979-2006/Jun 07  
(c) 2006 The Gale Group  
File 144:Pascal 1973-2006/May W3  
(c) 2006 INIST/CNRS  
File 239:Mathsci 1940-2006/Jul  
(c) 2006 American Mathematical Society  
File 256:TecInfoSource 82-2006/Jul  
(c) 2006 Info.Sources Inc  
File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec  
(c) 1998 Inst for Sci Info

Set	Items	Description
S1	38320	(E OR ELECTRONIC OR DIGITAL?? OR ONLINE OR ON()LINE) (3N) (RECORD? ? OR DOCUMENT? ?) OR ERECORD? ? OR EDOCUMENT? ?
S2	69950	AUTHENTICAT??? OR AUTHENTIC???
S3	21811	RECEIPT? ? OR (PROOF OR ACKNOWLEDG??? OR ACKNOWLEDGEMENT OR CONFIRM??? OR CONFIRMATION? ?) (3N) (RECEIV??? OR SUBMIT???? OR SUBMISSION? ? OR INPUT???)
S4	94	S3(3N) (APPEND??? OR PREPEND??? OR ATTACH??? OR CONCATENAT? - ?? OR CONJOIN??? OR JOIN??? OR CONNECT???)
S5	24733	MESSAGE()DIGEST? ? OR HASH??? OR ONE()WAY() (FUNCTION? ? OR ALGORITHM? ?)
S6	19922	(E OR ELECTRONIC???? OR DIGITAL??) (3N) (SIGNATURE? ? OR SIGN? ? OR SIGNING OR SIGNED)
S7	32	S6(3N) (REMOTE?? OR OFF()SITE? ? OR DISTANT?? OR DISTANCE)
S8	8482	(USER? ? OR SIGNER? ? OR SIGNATOR??? OR PERSON? ?) (3N) (REMOTE?? OR OFF()SITE? ? OR DISTANT?? OR DISTANCE)
S9	274	S5(3N) (PART OR PARTS OR PARTLY OR PARTIAL?? OR INCOMPLETE?? OR UNCOMPLETE? ? OR .NOT.()COMPLETE? ? OR FRACTION?? OR HALF OR HALFWAY OR SECTION??)
S10	157	S3(3N) (INTERNAL?? OR SECUR??? OR INTRANET? ?)
S11	0	(S1 OR S6) AND S4
S12	9	(S1 OR S6) AND S10
S13	6	RD (unique items)
S14	2	S13 NOT PY=2002:2006
S15	19	S1 AND S6 AND S3
S16	12	RD (unique items)
S17	12	S16 NOT S13
S18	8	S17 NOT PY=2002:2006
S19	1	S4 AND (DOCUMENT? ? OR RECORD? ?)
S20	36	S6(10N)S8 OR S7

S21	28	RD (unique items)
S22	15	S21 NOT PY=2002:2006
S23	189	(S1 OR S6) AND S3
S24	13	S23 AND S5
S25	11	RD (unique items)
S26	10	S25 NOT (S13 OR S17 OR S21)
S27	6	S26 NOT PY=2002:2006
S28	13	(S1 OR S6) AND S9
S29	8	RD (unique items)
S30	4	S29 NOT PY=2002:2006
S31	219	S5(3N)(PARTIAL?? OR INCOMPLETE?? OR UNCOMPLETE?? OR "NOT"(- )COMPLETE OR FRACTION?? OR HALF OR HALFWAY)
S32	37	S31 AND (DOCUMENT? ? OR RECORD? ?)
S33	20	RD (unique items)
S34	19	S33 NOT (S13 OR S17 OR S21 OR S26 OR S29)
S35	16	S34 NOT PY=2002:2006



14/5/2 (Item 1 from file: 8)  
DIALOG(R) File 8: Ei Compendex(R)  
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04371018 E.I. No: EIP96043118174

**Title:** Non-repudiation with mandatory proof of receipt

**Author:** Coffey, Tom; Saidha, Puneet

**Corporate Source:** Univ of Limerick, Limerick, Irel

**Source:** Computer Communication Review v 26 n 1 Jan 1996. p 6-17

**Publication Year:** 1996

**CODEN:** CCRED2 **ISSN:** 0146-4833

**Language:** English

**Document Type:** JA; (Journal Article) **Treatment:** T; (Theoretical)

**Journal Announcement:** 9605W4

**Abstract:** Non-repudiation allows an exchange of data between two principals in such a manner that the principals cannot subsequently deny their participation in the exchange. Current non-repudiation schemes, while providing a mandatory proof of origin service, generally provide only discretionary proof of receipt since it is difficult to enforce the return of the proof of receipt by the recipient. In this paper a new scheme for achieving mandatory mutual non-repudiation is proposed, encompassing both mandatory proof of origin and mandatory proof of receipt. The fundamental feature of the scheme is that the proofs of origin and receipt are not exchanged until both principals have submitted their **digitally signed** evidence to a trusted third party intermediary. This ensures that if the non-repudiation protocol is not completed, neither principal can gain from the exchange. An added advantage is that the process of dispute arbitration is considerably simplified since a small number of rules are required to decide whether an alleged data exchange took place. (Author abstract) 10 Refs.

**Descriptors:** \*Data communication systems; Computer networks; Network protocols; Digital signal processing; Security of data; Cryptography

**Identifiers:** Mandatory proof of **receipt** ; Public key cryptography; **Security** protocols; Dispute arbitration; Non-repudiation

**Classification Codes:**

722.3 (Data Communication, Equipment & Techniques); 723.2 (Data Processing)

722 (Computer Hardware); 723 (Computer Software); 716 (Radar, Radio & TV Electronic Equipment)

72 (COMPUTERS & DATA PROCESSING); 71 (ELECTRONICS & COMMUNICATIONS)

22/5/12 (Item 1 from file: 111)  
DIALOG(R)File 111:TGG Natl.Newspaper Index(SM)  
(c) 2006 The Gale Group. All rts. reserv.

05059145 Supplier Number: 19060535

**Multi-Card Accelerator from SPYRUS is Hardware Cryptographic Digital  
Signature Server Solution; Scaleable, High-Assurance Certification  
Authority, Remote Access, and Other Digital Content Signing  
Applications Now Enabled.**

Business Wire, pl270231

Jan 27, 1997

LANGUAGE: English RECORD TYPE: Citation

COMPANY NAMES: Spyrus Inc.--Product introduction

DESCRIPTORS: Computer peripherals industry--Product introduction

PRODUCT NAMES: 3573290 (Computer Peripherals NEC)

SIC CODES: 3577 Computer peripheral equipment, not elsewhere classified

FILE SEGMENT: NW File 649

File 348:EUROPEAN PATENTS 1978-2006/ 200623

(c) 2006 European Patent Office

File 349:PCT FULLTEXT 1979-2006/UB=20060608,UT=20060601

(c) 2006 WIPO/Univentio

File 371:French Patents 1961-2002/BOPI 200209

(c) 2002 INPI. All rts. reserv.

Set	Items	Description
S1	61166	(E OR ELECTRONIC OR DIGITAL?? OR ONLINE OR ON()LINE) (3N) (RECORD? ? OR DOCUMENT? ?) OR ERECORD? ? OR EDOCUMENT? ?
S2	46249	AUTHENTICAT??? OR AUTHENTIC???
S3	402143	RECEIPT? ? OR (PROOF OR ACKNOWLEDG??? OR ACKNOWLEDGEMENT OR CONFIRM??? OR CONFIRMATION? ?) (3N) (RECEIV??? OR SUBMIT???? OR SUBMISSION? ? OR INPUT????)
S4	2079	S3(3N) (APPEND??? OR PREPEND??? OR ATTACH??? OR CONCATENAT-?? OR CONJOIN??? OR JOIN??? OR CONNECT???)
S5	14871	MESSAGE()DIGEST? ? OR HASH??? OR ONE()WAY() (FUNCTION? ? OR ALGORITHM? ?)
S6	92592	(E OR ELECTRONIC???? OR DIGITAL??) (3N) (SIGNATURE? ? OR SIGN? ? OR SIGNING OR SIGNED)
S7	578	S6(3N) (REMOTE?? OR OFF()SITE? ? OR DISTANT?? OR DISTANCE)
S8	21244	(USER? ? OR SIGNER? ? OR SIGNATOR??? OR PERSON? ?) (3N) (REMOTE?? OR OFF()SITE? ? OR DISTANT?? OR DISTANCE)
S9	8	S1(3N)S2(100N)S4
S10	6	S9 NOT AD=20011126:20031126/PR
S11	6	S10 NOT AD=20031126:20060615/PR
S12	76	(S1 OR S6) (100N)S4
S13	68	S12 NOT S9
S14	56	S13 NOT AD=20011126:20031126/PR
S15	55	S14 NOT AD=20031126:20060615/PR
S16	13	S12(100N)S5
S17	8	S16 NOT S9
S18	8	S17 NOT AD=20011126:20031126/PR
S19	8	S18 NOT AD=20031126:20060615/PR
S20	16	S1(100N)S6(100N)S4
S21	7	S20 NOT (S9 OR S17)
S22	616	(S7 OR S6(10N)S8)
S23	13	S22(100N)S5
S24	13	S23 NOT (S9 OR S17 OR S21)
S25	12	S24 NOT AD=20011126:20031126/PR
S26	11	S25 NOT AD=20031126:20060615/PR
S27	40	S15 NOT (S9 OR S17 OR S21 OR S19 OR S24)
S28	23	S27 AND IC=(G06F OR H04L)

File 348:EUROPEAN PATENTS 1978-2006/ 200623  
(c) 2006 European Patent Office  
File 349:PCT FULLTEXT 1979-2006/UB=20060615,UT=20060608  
(c) 2006 WIPO/Univentio  
File 371:French Patents 1961-2002/BOPI 200209  
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Set	Items	Description
S1	599095	RECEIPT? ? OR (PROOF OR ACKNOWLEDG??? OR ACKNOWLEDGEMENT OR CONFIRM??? OR CONFIRMATION? ?)
S2	3394	S1(3N) (INTERNAL?? OR SECUR??? OR INTRANET? ?)
S3	14898	MESSAGE()DIGEST? ? OR HASH??? OR ONE()WAY() (FUNCTION? ? OR ALGORITHM? ?)
S4	577	S3(3N) (PART OR PARTS OR PARTLY OR PARTIAL?? OR INCOMPLETE?? OR UNCOMPLETE?? OR "NOT"()COMPLETE? ? OR FRACTION?? OR HALF - OR HALFWAY OR SECTION??)
S5	61206	(E OR ELECTRONIC OR DIGITAL?? OR ONLINE OR ON()LINE) (3N) (RECORD? ? OR DOCUMENT? ?) OR ERECORD? ? OR EDOCUMENT? ?
S6	92619	(E OR ELECTRONIC???? OR DIGITAL??) (3N) (SIGNATURE? ? OR SIGN-N? ? OR SIGNING OR SIGNED)
S7	77	S2(20N)S5:S6
S8	63	S7 AND IC=(G06F OR H04L)
S9	47	S8 NOT AD=20011126:20031126/PR
S10	41	S9 NOT AD=20031126:20060615/PR
S11	42	S4(20N)S5:S6
S12	35	S11 NOT AD=20011126:20031126/PR
S13	26	S12 NOT AD=20031126:20060615/PR
S14	23	S13 NOT S10
S15	102	S3(3N) (PARTIAL?? OR INCOMPLETE?? OR UNCOMPLETE?? OR "NOT"(-)COMPLETE?? OR FRACTION?? OR HALF OR HALFWAY)
S16	10	S15(100N)S5:S6
S17	6	S16 NOT (S10 OR S11)

21/3,K/6 (Item 3 from file: 349)  
DIALOG(R) File 349:PCT FULLTEXT  
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00561873 \*\*Image available\*\*

**METHOD AND APPARATUS FOR ESTABLISHING ELECTRONIC TRANSACTIONS**  
**PROCEDE ET APPAREIL POUR EFFECTUER DES TRANSACTIONS ELECTRONIQUES**

Patent Applicant/Assignee:

RECEIPT COM INC,

Inventor(s):

JEVANS David,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200025246 A1 20000504 (WO 0025246)

Application: WO 99US24635 19991020 (PCT/WO US9924635)

Priority Application: US 98105778 19981027; US 98223678 19981230

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK EE ES FI GB GD  
GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG  
MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN  
YU ZA ZW GH GM KE LS MW SD SL SZ TZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT  
BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA  
GN GW ML MR NE SN TD TG

Publication Language: English

Fulltext Word Count: 12827

Fulltext Availability:

Detailed Description

Detailed Description

... generated by the Issuer. The Data Definition 50 may also include indexing "hooks" for associating **electronic** transaction **documents** with a Transaction ID, and for associating them with one another in sequential relationship (i...

...the Internal Representation 52 may be made without departing from the spirit of the invention.

**Document** Type Definition for **Electronic Transaction Document**

class **Digital Receipt**

<?xml version = "1.0"?>

<!DOCTYPE digital-receipt

<!-- List of the ELEMENTS (contents) of a Digital Receipt

<!-- The root element of a receipt **document** -->

<!-- NOTE that the **digital signature** (s) are **appended** to the **receipt**

<!--

they cannot be described in the XML definition because they are generated -->

<!-- '

from a document...

...receipts

<!ATTLIST re-ceipt

ID id ID #REQUIRED>

<!-- Example of a **Electronic Transaction Document** Body -->

26/3,K/5 (Item 1 from file: 349)  
DIALOG(R) File 349:PCT FULLTEXT  
(c) 2006 WIPO/Univentio. All rts. reserv.

00939695 \*\*Image available\*\*

**SYSTEM AND METHOD OF USER AND DATA VERIFICATION**

**SYSTEME ET PROCEDE DE VERIFICATION D'UTILISATEUR ET DE DONNEES**

Patent Applicant/Inventor:

BRANDYS Pascal, 1401 Camino del Mar, Suite 202, Del Mar, CA 92014, US, US  
(Residence), US (Nationality)

Legal Representative:

HUNT Dale C (agent), Knobbe, Martens, Olson & Bear, LLP, 16th Floor, 620  
Newport Center Drive, Newport Beach, CA 92660, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200273877 A2-A3 20020919 (WO 0273877)

Application: WO 2002US7517 20020311 (PCT/WO US0207517)

Priority Application: US 2001274518 20010309

Designated States:

(Protection type is "patent" unless otherwise stated - for applications  
prior to 2004)

AE AG AL AM AT (utility model) AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR  
CU CZ (utility model) CZ DE (utility model) DE DK (utility model) DK DM  
DZ EC EE (utility model) EE ES FI (utility model) FI GB GD GE GH GM HR HU  
ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX  
MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK (utility model) SK SL TJ TM TN  
TR TT TZ UA UG UZ VN YU ZA ZM ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 6198

Fulltext Availability:

Claims

**Claim**

... successful, generating a digital signature for a message, wherein the  
digital signature includes an encrypted **message digest** of the  
message, and wherein the digital signature is encrypted, at least in  
part, using the generated private key; and  
transmitting the generated **digital signature** to a **remote**  
**electronic** device.

20 The method of Claim 19, wherein the digital signature is transmitted  
with the...

10/3,K/19 (Item 5 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2006 WIPO/Univentio. All rts. reserv.

00939235 \*\*Image available\*\*

**SYSTEM AND METHOD FOR PROVIDING SECURE TRANSACTIONS**

**SYSTEME ET PROCEDE PERMETTANT DE FOURNIR DES TRANSACTIONS SECURISEES**

Patent Applicant/Assignee:

GEOTRUST INC, 115 SW Ash, Portland, OR 97204, US, -- (Residence), US  
(Nationality), (For all designated states except: US)

Patent Applicant/Inventor:

ROSENBERG Jonathan B, Auburndale, MA, US, US (Residence), US  
(Nationality), (Designated only for: US)

CHEN David Y, Portland, OR, US, US (Residence), US (Nationality),  
(Designated only for: US)

REMY David L, West Linn, OR, US, US (Residence), US (Nationality),  
(Designated only for: US)

GARRICK Lucy, Portland, OR, US, US (Residence), US (Nationality),  
(Designated only for: US)

Legal Representative:

CANNAVALE Stephen (agent), Goodwin Procter LLP, 7 Becker Farm Road,  
Roseland, NJ 07068, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200273364 A2-A3 20020919 (WO 0273364)

Application: WO 2002US7657 20020312 (PCT/WO US0207657)

Priority Application: US 2001275074 20010312

Designated States:

(Protection type is "patent" unless otherwise stated - for applications  
prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ  
EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR  
LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI  
SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 8764

Main International Patent Class (v7): G06F-017/60

International Patent Class (v7): G06F-011/00

Fulltext Availability:

Detailed Description

Detailed Description

... to dispute

resolution services based on a True Record.

1 5

Whenever a Trust Authority **digital signature** is created or  
encountered by a TrustWatch user there is an option of  
transmitting this **securely** to a digital **receipt** vault. The  
digital receipt vault is a highly secure location that enables  
the Trust Administrator...

17/3,K/2 (Item 2 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
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00799074

Method of zero-knowledge digital signatures, for creating a collision-resistant signature

Verfahren zur digitalen Unterschrift mit Null-Kenntnis, zum Herstellen von kollisionsresistenten Unterschriften

Procede de signature numerique a connaissance nulle, permettant d'elaborer une signature resistant aux collisions

PATENT ASSIGNEE:

FRANCE TELECOM, (1334142), Etablissement autonome de droit public, 6, Place d'Alleray, 75015 Paris, (FR), (applicant designated states: DE;GB)

LA POSTE, (1420723), 4, Quai du Point du Jour, F-92777 Boulogne Billancourt Cedex, (FR), (applicant designated states: DE;GB)

INVENTOR:

Girault, Marc, Cabinet Ballot-Schmit, 9 Boulevard de Strasbourg, 83000 Toulon, (FR)

LEGAL REPRESENTATIVE:

Ballot, Paul Denis Jacques (39687), Cabinet Ballot-Schmit, 9, boulevard de Strasbourg, 83000 Toulon, (FR)

PATENT (CC, No, Kind, Date): EP 743775 A1 961120 (Basic)  
EP 743775 B1 980114

APPLICATION (CC, No, Date): EP 96480053 960430;

PRIORITY (CC, No, Date): FR 956259 950517

DESIGNATED STATES: DE; GB

INTERNATIONAL PATENT CLASS (V7): H04L-009/32;

TRANSLATED ABSTRACT WORD COUNT: 126

ABSTRACT WORD COUNT: 128

LANGUAGE (Publication,Procedural,Application): French; French; French

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9803	714
CLAIMS B	(German)	9803	691
CLAIMS B	(French)	9803	701
SPEC B	(French)	9803	5524
Total word count - document A			0
Total word count - document B			7630
Total word count - documents A + B			7630

...CLAIMS in that the said transformation stage (35) consists of combining one of the said first ( e ) and second (y) **signature** parameters with the said third parameter (g(M)).

6. A procedure according to any of...

...to which are input a commitment value (c) of a random value (r) and a **fraction** (h1) of a **hash** code (h(M)) given by a collision-resistant hash function (h) to which the message...



File 347:JAPIO Dec 1976-2005/Dec(Updated 060404)

(c) 2006 JPO & JAPIO

File 350:Derwent WPIX 1963-2006/UD,UM &UP=200637

(c) 2006 The Thomson Corp.

Set	Items	Description
S1	22421	(E OR ELECTRONIC OR DIGITAL?? OR ONLINE OR ON()LINE) (3N) (RECORD? ? OR DOCUMENT? ?) OR ERECORD? ? OR EDOCUMENT? ?
S2	42143	AUTHENTICAT??? OR AUTHENTIC???
S3	51030	RECEIPT? ? OR (PROOF OR ACKNOWLEDG??? OR ACKNOWLEDGEMENT OR CONFIRM??? OR CONFIRMATION? ?) (3N) (RECEIV??? OR SUBMIT???? OR SUBMISSION? ? OR INPUT???)
S4	1044	S3(3N) (APPEND??? OR PREPEND??? OR ATTACH??? OR CONCATENAT? - ?? OR CONJOIN??? OR JOIN??? OR CONNECT???)
S5	4342	MESSAGE()DIGEST? ? OR HASH??? OR ONE()WAY() (FUNCTION? ? OR ALGORITHM? ?)
S6	200648	(E OR ELECTRONIC???? OR DIGITAL??) (3N) (SIGNATURE? ? OR SIGN? ??)
S7	881	S6(3N) (REMOTE?? OR OFF()SITE? ? OR DISTANT?? OR DISTANCE)
S8	8338	(USER? ? OR SIGNER? ? OR SIGNATOR??? OR PERSON? ?) (3N) (REMOTE?? OR OFF()SITE? ? OR DISTANT?? OR DISTANCE)
S9	1	S1(3N) S2 AND S4
S10	20	(S1 OR S6) AND S4
S11	19	S10 NOT S9
S12	16	S11 NOT AD=20011126:20031126/PR
S13	14	S12 NOT AD=20031126:20060615/PR
S14	10982	(E OR ELECTRONIC???? OR DIGITAL??) (3N) (SIGNATURE? ? OR SIGN? ? OR SIGNING OR SIGNED)
S15	66	S14(3N) (REMOTE?? OR OFF()SITE? ? OR DISTANT?? OR DISTANCE)
S16	1	S1 AND S3 AND S15
S17	0	S16 NOT (S9 OR S11)
S18	7	S1 AND S15
S19	6	S18 NOT (S9 OR S11)
S20	3	S19 NOT AD=20011126:20031126/PR
S21	91	S1 AND S5 AND S14
S22	5	S21 AND S3
S23	5	S22 NOT (S9 OR S11 OR S19)
S24	86	S21 NOT (S9 OR S11 OR S19 OR S22)
S25	58	S24 NOT AD=20011126:20031126/PR
S26	49	S25 NOT AD=20031126:20060615/PR
S27	7	S26 AND SECURE
S28	44	S1 AND S14 AND S3
S29	37	S28 NOT (S9 OR S11 OR S19 OR S22 OR S27)
S30	24	S29 NOT AD=20011126:20031126/PR
S31	20	S30 NOT AD=20031126:20060615/PR
S32	43	S14 AND S8
S33	40	S32 NOT (S9 OR S11 OR S19 OR S22 OR S27 OR S29)
S34	22	S33 NOT AD=20011126:20031126/PR
S35	16	S34 NOT AD=20031126:20060615/PR

File 347:JAPIO Dec 1976-2005/Dec(Updated 060404)

(c) 2006 JPO & JAPIO

File 350:Derwent WPIX 1963-2006/UD,UM &UP=200637

(c) 2006 The Thomson Corp.

Set	Items	Description
S1	308552	RECEIPT? ? OR (PROOF OR ACKNOWLEDG??? OR ACKNOWLEDGEMENT OR CONFIRM??? OR CONFIRMATION? ?)
S2	2088	S1(3N) (INTERNAL?? OR SECUR??? OR INTRANET? ?)
S3	4342	MESSAGE()DIGEST? ? OR HASH??? OR ONE()WAY() (FUNCTION? ? OR ALGORITHM? ?)
S4	183	S3(3N) (PART OR PARTS OR PARTLY OR PARTIAL?? OR INCOMPLETE?? OR UNCOMPLETE? ? OR .NOT.()COMPLETE? ? OR FRACTION?? OR HALF OR HALFWAY OR SECTION??)
S5	22421	(E OR ELECTRONIC OR DIGITAL?? OR ONLINE OR ON()LINE) (3N) (R- ECORD? ? OR DOCUMENT? ?) OR ERECORD? ? OR EDOCUMENT? ?
S6	10982	(E OR ELECTRONIC???? OR DIGITAL??) (3N) (SIGNATURE? ? OR SIG- N? ? OR SIGNING OR SIGNED)
S7	29	S2 AND S5:S6
S8	21	S7 NOT AD=20011126:20031126/PR
S9	19	S8 NOT AD=20031126:20060615/PR
S10	25	S4 AND S5:S6
S11	17	S10 NOT AD=20011126:20031126/PR
S12	14	S11 NOT AD=20031126:20060615/PR
S13	14	S12 NOT S9
S14	11	S3(3N) (PARTIAL?? OR INCOMPLETE?? OR UNCOMPLETE?? OR HALF OR HALFWAY)
S15	11	S14 NOT (S9 OR S13)
S16	9	S15 NOT AD=20011126:20031126/PR
S17	7	S16 NOT AD=20031126:20060615/PR

13/5/4 (Item 1 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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015514715 \*\*Image available\*\*  
WPI Acc No: 2003-576862/200354  
XRPX Acc No: N03-458552

**Unique authoritative electronic record creation method involves generating and prepending receipts to beginning of record and appending identifying information to end of record**

Patent Assignee: AINSWORTH S G (AINS-I); HAWKINS C F (HAWK-I); PLASTER D J (PLAS-I)

Inventor: AINSWORTH S G; HAWKINS C F; PLASTER D J

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20030093679	A1	20030515	US 2001993132	A	20011114	200354 B

Priority Applications (No Type Date): US 2001993132 A 20011114

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 20030093679	A1		21	H04L-009/00	

Abstract (Basic): US 20030093679 A1

NOVELTY - A receipt (7) that includes information relating to the **electronic record** (6) and identifying information (8) that includes a provable representation of the receipt, are generated. The **receipt** is **prepended** to the beginning of the record and the identifying information is appended to the ending of the record. The record is stored in the repository (5).

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) a method for creating and validating **digital** signatures for **electronic** authoritative **record** maintained in a secure environment;

(2) a computer-readable medium for storing a program that allows a user to receive, and **digitally** sign a copy of **electronic record** that is stored in a remote location;

(3) a method for **digitally** signing **electronic record** received from a secure environment;

(4) an apparatus for creating and storing a unique authoritative record;

(5) a system for obtaining a **digital signature** on an authoritative record stored in a secure environment;

(6) a system for creating and validating **digital** signatures on an **electronic** authoritative **record**; and

(7) an apparatus for **digitally** signing an **electronic record**

USE - For security of **electronic records** in secure environment through computer systems especially for business applications.

ADVANTAGE - Ensures that copies made from a unique authoritative **electronic record** are easily distinguished as copies. Allows a person to **electronically** sign a record at a remote location without compromising the uniqueness of the record.

DESCRIPTION OF DRAWING(S) - The figure shows a block diagram explaining the generation of a **digital signature** at a remote location and transmission to the repository.

repository (5)

**electronic record** (6)

receipt (7)

identifying information (8)

**digital signature (11)**

pp; 21 DwgNo 3/6

Title Terms: UNIQUE; ELECTRONIC; RECORD; CREATION; METHOD; GENERATE;  
RECEIPT; BEGIN; RECORD; IDENTIFY; INFORMATION; END; RECORD

Derwent Class: T01

International Patent Class (Main): H04L-009/00

File Segment: EPI

20/5/2 (Item 2 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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014333926 \*\*Image available\*\*  
WPI Acc No: 2002-154629/200220  
XRPX Acc No: N02-117592

Digital signature system, has several remotely located  
computer-based systems coupled to document computer-based system over  
public data network

Patent Assignee: DOCUTOUCH CORP (DOCU-N); COCHRAN J M (COCH-I); GONSER T H  
(GONS-I); HAJMIRAGHA M (HAJM-I); LORENZINI C V (LORE-I); RANFT E C  
(RANF-I)

Inventor: COCHRAN J M; HAJMIRAGHA M; GONSER T H; LORENZINI C V; RANFT E C  
Number of Countries: 096 Number of Patents: 005

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200199388	A2	20011227	WO 2001US41108	A	20010621	200220 B
JP 2002023629	A	20020123	JP 200138965	A	20010215	200222
AU 200173624	A	20020102	AU 200173624	A	20010621	200230
US 20040225884	A1	20041111	US 2000213204	P	20000621	200475
			US 2000705964	A	20001103	
			US 2003749814	A	20031230	
AU 2001273624	A8	20050915	AU 2001273624	A	20010621	200569

Priority Applications (No Type Date): US 2000705964 A 20001103; US  
2000213204 P 20000621; US 2003749814 A 20031230

Patent Details:

Patent No	Kind	Ian Pg	Main IPC	Filing Notes
WO 200199388	A2	E 23	H04L-009/32	
Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW				
JP 2002023629	A		10 G09C-001/00	
AU 200173624	A			Based on patent WO 200199388
US 20040225884	A1		H04L-009/00	Provisional application US 2000213204
				CIP of application US 2000705964
AU 2001273624	A8		G06F-001/00	Based on patent WO 200199388

Abstract (Basic): WO 200199388 A2

NOVELTY - The system has several remotely located computer-based  
systems coupled to a document computer-based system over a public data  
network. The remotely located computer-based systems allow users at  
remote locations to sign and designate for signature blocks of text of  
a document that is securely stored at the document computer-based  
system.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for a  
method various documents signing functions

USE - For digital signatures in documents

ADVANTAGE - Imparts initialing information in digitally signed  
documents in order to make digital signing process more like what is  
performed in paper versions

DESCRIPTION OF DRAWING(S) - The figure shows a system block diagram  
formed in accordance with the invention.

pp; 23 DwgNo 1/10

Title Terms: DIGITAL; SIGNATURE; SYSTEM; REMOTE; LOCATE; COMPUTER; BASED;  
SYSTEM; COUPLE; DOCUMENT; COMPUTER; BASED; SYSTEM; PUBLIC; DATA; NETWORK  
Derwent Class: T01

International Patent Class (Main): G06F-001/00; G09C-001/00; H04L-009/00;  
H04L-009/32  
International Patent Class (Additional): G06F-017/60; H04L-029/06  
File Segment: EPI

23/5/3 (Item 3 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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013851835 \*\*Image available\*\*  
WPI Acc No: 2001-336048/200136  
Related WPI Acc No: 2001-336066  
XRPX Acc No: N01-242570

Method in which client registration process establishes identity of  
client holding authorization code by using service provider that returns  
hash of document as reference which client will use to identify document

Patent Assignee: RDM CORP (RDMR-N); XIGN INC (XIGN-N)

Inventor: PAVLIK P

Number of Countries: 002 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
CA 2272723	A1	20001125	CA 2272723	A	19990525	200136 B
US 6807633	B1	20041019	US 2000577660	A	20000525	200469

Priority Applications (No Type Date): CA 2272723 A 19990525

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
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CA 2272723	A1	E	4	H04L-009/32	
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US 6807633	B1			H04L-009/00	
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Abstract (Basic): CA 2272723 A1

NOVELTY - **Electronic document** is submitted by client while  
template is maintained on file in database by service provider at the  
request of client and identified by agreed reference submitted by  
client. Service provider returns **hash** of the document as reference  
which the client will use when submitting requests to identify document  
and the service provider will recalculate **hash** on each request to  
verify the document selection.

USE - In distribution and management of digital certificates.

ADVANTAGE - The service provider could append a client's **digital**  
signature to an **electronic document** following the **receipt** of  
instructions and authorization from the client over a secure  
communications line and then provide the **digitally signed document**  
to the client.

DESCRIPTION OF DRAWING(S) - The drawing shows client-service  
provider interaction during establishing a secure connection.

pp; 4 DwgNo 1/1

Title Terms: METHOD; CLIENT; REGISTER; PROCESS; ESTABLISH; IDENTIFY; CLIENT  
; HOLD; AUTHORISE; CODE; SERVICE; RETURN; **HASH** ; DOCUMENT; REFERENCE;  
CLIENT; IDENTIFY; DOCUMENT

Derwent Class: T01; W01

International Patent Class (Main): H04L-009/00; H04L-009/32

File Segment: EPI

23/5/4 (Item 4 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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011656742 \*\*Image available\*\*  
WPI Acc No: 1998-073650/199807  
XRPX Acc No: N98-059021

Digital signature document communication apparatus connected to  
e.g. data processor, data communication system used in network - has  
document reception side control device to receive document to be  
confirmed by using digital signature stored in document  
verification data control device and assumed to be formed on document  
itself

Patent Assignee: MITSUBISHI ELECTRIC CORP (MITQ )

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 9311854	A	19971202	JP 96127360	A	19960522	199807 B

Priority Applications (No Type Date): JP 96127360 A 19960522

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
JP 9311854	A	14	G06F-017/21	

Abstract (Basic): JP 9311854 A

The apparatus includes a document side transmission device (1) to  
transmit the **digital signature** , formed on a document, to a document  
verification data control device (3). The document is gathered by a  
document reception side device (2). The document is verified by using  
the **digital signature** stored in the verification data control  
device.

When the document verification data control device searches for the  
**digital signature** , it uses a related index. The **message digest**  
for **digital signature** production is used as the index. The document  
verification data control device can also store the **document** aside  
from the **digital signature** .

USE - Also for file in file system.

ADVANTAGE - Determines authentication or alteration of file. Does  
not use large capacity data memory. Provides warranty function for  
document. Enables efficient search of **digital signature** . Allows  
referral of stored document to verified document. Enables reduction of  
data sent to reception side apparatus from document transmission side  
apparatus. Can store key data for decoding of encrypted document.

Dwg.1/22

Title Terms: DIGITAL; SIGNATURE; DOCUMENT; COMMUNICATE; APPARATUS; CONNECT;  
DATA; PROCESSOR; DATA; COMMUNICATE; SYSTEM; NETWORK; DOCUMENT; RECEPTION;  
SIDE; CONTROL; DEVICE; RECEIVE; DOCUMENT; DIGITAL; SIGNATURE; STORAGE;  
DOCUMENT; VERIFICATION; DATA; CONTROL; DEVICE; ASSUME; FORMING; DOCUMENT

Derwent Class: P85; T01; W01

International Patent Class (Main): G06F-017/21

International Patent Class (Additional): G06F-012/00; G09C-001/00;

H04L-009/32

File Segment: EPI; EngPI



23/5/5 (Item 5 from file: 350)  
 DIALOG(R) File 350:Derwent WPIX  
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008953086 \*\*Image available\*\*  
 WPI Acc No: 1992-080355/199210  
 XRPX Acc No: N92-060198

**Secure time stamping method for digital documents - transmits document to stamping authority to add time data to form receipt and applies cryptographic signature before returning to author**

Patent Assignee: HABER S A (HABE-I); STORNETTA W S (STOR-I); BELL COMMUNICATIONS RES INC (BELL-N); BELL COMMUNICATIONS RES (BELL-N); BELL COMMUNIC RES I (BELL-N); TELCORDIA TECHNOLOGIES INC (TELC-N)

Inventor: HABER S A; STORNETTA W S; STORNETTA W  
 Number of Countries: 017 Number of Patents: 014

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 9203000	A	19920220				199210	B
US 5136646	A	19920804	US 91666896	A	19910308	199234	
US 5136647	A	19920804	US 90561888	A	19900802	199234	
EP 541727	A1	19930519	EP 91917680	A	19910730	199320	
			WO 91US5386	A	19910730		
JP 6501571	W	19940217	JP 91516026	A	19910730	199412	
			WO 91US5386	A	19910730		
US 34954	E	19950530	US 90561888	A	19900802	199527	
			US 93156120	A	19931122		
EP 541727	A4	19951025	EP 91917680	A		199620	
CA 2088371	C	19980811	CA 2088371	A	19910730	199843	
EP 541727	B1	19991117	EP 91917680	A	19910730	199953	
			WO 91US5386	A	19910730		
DE 69131789	E	19991223	DE 631789	A	19910730	200006	
			EP 91917680	A	19910730		
			WO 91US5386	A	19910730		
ES 2142307	T3	20000416	EP 91917680	A	19910730	200026	
JP 3278721	B2	20020430	JP 91516026	A	19910730	200230	
			WO 91US5386	A	19910730		
JP 3281881	B2	20020513	JP 91516026	A	19910730	200234	
			JP 2001204357	A	19910730		
JP 2002092220	A	20020329	JP 91516026	A	19910730	200238	
			JP 2001204357	A	19910730		

Priority Applications (No Type Date): US 91666896 A 19910308; US 90561888 A 19900802; US 93156120 A 19931122

Cited Patents: US 4145568; US 4206315; 2.Jnl.Ref

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 9203000	A		34		
					Designated States (National): CA JP
					Designated States (Regional): AT BE CH DE DK ES FR GB GR IT LU NL SE
US 5136646	A		8	H04L-009/00	
US 5136647	A		10	H04L-009/00	
EP 541727	A1 E		34	H04L-009/00	Based on patent WO 9203000
					Designated States (Regional): BE CH DE ES FR GB IT LI NL SE
JP 6501571	W		34	G09C-001/00	Based on patent WO 9203000
US 34954	E		10	H04L-009/00	Reissue of patent US 5136647
CA 2088371	C			H04L-009/00	
EP 541727	B1 E			H04L-009/00	Based on patent WO 9203000
					Designated States (Regional): BE CH DE ES FR GB IT LI NL SE
DE 69131789	E			H04L-009/00	Based on patent EP 541727
					Based on patent WO 9203000
ES 2142307	T3			H04L-009/00	Based on patent EP 541727

JP 3278721	B2	14 G09C-001/00	Previous Publ. patent JP 6501571 Based on patent WO 9203000
JP 3281881	B2	14 G09C-001/00	Div ex application JP 91516026 Previous Publ. patent JP 2002092220
JP 2002092220 A		13 G06F-017/60	Div ex application JP 91516026

Abstract (Basic): WO 9203000 A

A **digital** representation of the **document** is transmitted from an originator to an outside agency. The outside agency creates a **receipt** comprising a digital representation of then current time, and at least a portion of a **digital** representation of the **document**. The **receipt** is certified at the outside agency by means of a varifiable **digital** cryptographic **signature** scheme. The temporal sequence of **digital documents** in a series is also clarified.

ADVANTAGE - Reliable method of **document** verification for e .g. intellectual property uses.

Dwg.1/5

Title Terms: SECURE; TIME; STAMP; METHOD; DIGITAL; DOCUMENT; TRANSMIT;  
DOCUMENT; STAMP; AUTHORISE; ADD; TIME; DATA; FORM; **RECEIPT** ; APPLY;  
CRYPTOGRAPHIC; SIGNATURE; RETURN

Derwent Class: P85; T01; W01

International Patent Class (Main): G06F-017/60; G09C-001/00; H04L-009/00

International Patent Class (Additional): H04L-009/30; H04L-009/32

File Segment: EPI; EngPI

27/5/6 (Item 6 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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013084895 \*\*Image available\*\*  
WPI Acc No: 2000-256767/200022  
XRPX Acc No: N00-190923

System for securely associating signature data other data for  
authenticating or digitally signing digital data objects, uses a  
hashing routine to generate an irreversible, distinct data object from  
the digital data and signature

Patent Assignee: BORGERES F J (BORG-I)

Inventor: BORGERES F J

Number of Countries: 025 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200013368	A1	20000309	WO 99US18824	A	19990827	200022 B

Priority Applications (No Type Date): US 98144043 A 19980831

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
WO 200013368	A1	E 23	H04L-009/32	

Designated States (National): CA IL IN JP KR MX SG

Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LU  
MC NL PT SE

Abstract (Basic): WO 200013368 A1

NOVELTY - A first data object supplied by the user (11) is combined with signature or authentication data (13), the combined data object and signature is encrypted (15) before being digested (or hashed ) (17) to generate a distinct data object characteristic of the input data. In an authentication process, a copy of the data object and signature or authentication data is subject to the same process and the generated distinct data object is compared with the original.

USE - For use in providing authentication of digital data, such as document or other data files or objects, particularly for securely appending or incorporating a digital signature or indicia of authenticity into a data object.

ADVANTAGE - Because the hashing or digesting step is one-way or irreversible, the encrypted portion of the signature is not susceptible to unauthorized decryption.

DESCRIPTION OF DRAWING(S) - The figure is a high level flow chart depicting the steps for providing a data object with authentication or signature data.

User (11)

Authentication data (13)

Encryption (15)

Digest hash to form distinct data object (17)

pp; 23 DwgNo 1/4

Title Terms: SYSTEM; SECURE ; ASSOCIATE; SIGNATURE; DATA; DATA;

AUTHENTICITY; DIGITAL; SIGN; DIGITAL; DATA; OBJECT; HASH ; ROUTINE;

GENERATE; IRREVERSIBLE; DISTINCT; DATA; OBJECT; DIGITAL; DATA; SIGNATURE

Derwent Class: W01

International Patent Class (Main): H04L-009/32

File Segment: EPI

31/5/4 (Item 1 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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017470070 \*\*Image available\*\*

WPI Acc No: 2005-793749/200581

XRPX Acc No: N05-657451

**Time stamping method for digital documents , involves certifying time stamping receipt containing identifying data and time difference, by signing receipt with time-based private signature key as provided by time stamping authority**

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC )

Inventor: MATYAS S M; PEYRAVIAN M; ROGINSKY A; ZUNIC N

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 6965998	B1	20051115	US 99459187	A	19991210	200581 B

Priority Applications (No Type Date): US 99459187 A 19991210

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 6965998	B1		5	H04L-009/00	

Abstract (Basic): US 6965998 B1

NOVELTY - The document to-be-certified associated with identifying data is received and time difference between time reference and time **receipt** of identifying data as computed by time stamping authority (TSA), is added to the document to obtain time stamping **receipts** . The time stamping **receipts** is signed using time based private signature key provided by the TSA at that predetermined time reference.

USE - Used for time stamping of **digital documents** to **sign** stamping by time-based private signature key provided by time stamping authority.

ADVANTAGE - Improves security as the efforts to modify a document or tampering can be easily detected.

DESCRIPTION OF DRAWING(S) - The figure shows the flow diagram of the time stamping protocol method.

pp; 5 DwgNo 1/1

Title Terms: TIME; STAMP; METHOD; DIGITAL; DOCUMENT; CERTIFY; TIME; STAMP; .

**RECEIPT** ; CONTAIN; IDENTIFY; DATA; TIME; DIFFER; SIGN; **RECEIPT** ; TIME;

BASED; PRIVATE; SIGNATURE; KEY; TIME; STAMP; AUTHORISE

Derwent Class: T01; W01

International Patent Class (Main): H04L-009/00

International Patent Class (Additional): H04K-001/00

File Segment: EPI

31/5/9 (Item 6 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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014309933 \*\*Image available\*\*  
WPI Acc No: 2002-130636/200217  
XRPX Acc No: N02-098539

Electronic document recording method for government licensing applications, involves signing receipt by recorder after which electronic document is imaged and indexed  
Patent Assignee: INGEO SYSTEMS INC (INGE-N); RASMUSSEN A L (RASM-I); SLATER C N (SLAT-I)

Inventor: RASMUSSEN A L; SLATER C N  
Number of Countries: 096 Number of Patents: 004  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200195125	A1	20011213	WO 2001US18305	A	20010606	200217 B
AU 200166736	A	20011217	AU 200166736	A	20010606	200225
US 20020069179	A1	20020606	US 2000210180	P	20000606	200241
			US 2001875579	A	20010606	
US 6796489	B2	20040928	US 2000210180	P	20000606	200464
			US 2001875579	A	20010606	

Priority Applications (No Type Date): US 2001875579 A 20010606; US 2000210180 P 20000606

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 200195125	A1	E	54	G06F-015/00	
Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW					
Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW					
AU 200166736	A			G06F-015/00	Based on patent WO 200195125
US 20020069179	A1			G06F-017/60	Provisional application US 2000210180
US 6796489	B2			G06F-017/60	Provisional application US 2000210180

Abstract (Basic): WO 200195125 A1

NOVELTY - The number of pages in a validated **electronic document**, is determined for charging fee. Endorsement data is inserted in an endorsement portion of the **electronic document**. A recorder **signature** block is added to the **electronic document**, if it is not present. A **receipt** generated for recordation is signed by the recorder, after which the **electronic document** is imaged and indexed.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (a) Computer program product containing instruction for **electronic document** recording;
- (b) **Electronic document** verifying method;
- (c) Computer program product for **electronic document** verification;
- (d) **Signature** module for embedding **digital signatures** in **electronic document**

USE - For processing **electronic documents** e.g. XML document such that the notary signatures are validated, for government licensing applications such as business licenses, vehicle licenses, hunting and fishing licenses and documents filed with courts, securities exchange

commission, etc., and real estate transaction, security interest and loan agreement, medical records, pharmaceutical application.

ADVANTAGE - By embedding **digital** signatures in the **electronic document**, verification is performed efficiently.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of an **electronic document**.

pp; 54 DwgNo 2A/6

Title Terms: ELECTRONIC; DOCUMENT; RECORD; METHOD; GOVERN; APPLY; SIGN;  
**RECEIPT**; RECORD; AFTER; ELECTRONIC; DOCUMENT; IMAGE; INDEX

Derwent Class: T01

International Patent Class (Main): G06F-015/00; G06F-017/60

File Segment: EPI

31/5/11 (Item 8 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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014185297 \*\*Image available\*\*  
WPI Acc No: 2002-005994/200201  
XRPX Acc No: N02-005084

**Preservation method of electronic document transmitted through internet, involves collecting log corresponding to electronic document to which digital signature is added**

Patent Assignee: HITACHI LTD (HITA )  
Number of Countries: 001 Number of Patents: 001  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 2001282624	A	20011012	JP 2000101217	A	20000331	200201 B

Priority Applications (No Type Date): JP 2000101217 A 20000331

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 2001282624	A		4	G06F-012/14	

Abstract (Basic): JP 2001282624 A

NOVELTY - A log (7) containing the **receipt** time of an **electronic document** is added to the document. The log corresponding to the **electronic document** is collected and a **digital signature** is added to the document which is then stored in a memory as original **electronic document**.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for original preservation system for **electronic document**.

USE - For preserving original **electronic document** transmitted through internet.

ADVANTAGE - The denial from the transmission side can be prevented, since original document is identified based on the existence of **digital signature**.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of the original preservation system. (Drawing includes non-English language text).

Log (7)

pp; 4 DwgNo 1/3

Title Terms: PRESERVE; METHOD; ELECTRONIC; DOCUMENT; TRANSMIT; THROUGH;  
COLLECT; LOG; CORRESPOND; ELECTRONIC; DOCUMENT; DIGITAL; SIGNATURE; ADD  
Derwent Class: P85; T01

International Patent Class (Main): G06F-012/14

International Patent Class (Additional): G09C-001/00

File Segment: EPI; EngPI